



Case #33

NAME Educational Activities Committee

Case provided by:

Dr. Richard Morris (Forensic Path fellow)

Dr. Stephanie Dean (FP program director)

State of Maryland OCME.



1. The decedent was a 33-year-old male who was shot during an altercation and pronounced dead in the trauma unit.

What caused the defects surrounding the gunshot wound?

- Stippling (gunpowder)
- Hemorrhage into hair follicles
- Insect bites
- Medical intervention
- Fragmented glass (interposed target)

Answer...

D. Medical Intervention

The key to this case was that the decedent was transported to the trauma unit. There, among other interventions, they sutured and stapled the defect.

Investigation of the case revealed that the decedent was shot from a distance as he was running away from the suspect. Complete investigation and review of medical records is of importance to allow for appropriate interpretation of wounds and defects.



A. Stippling (44.65% responses)

These defects may resemble gunpowder stippling, but there are very few of them and they are relatively close to the defect. Arguably, it is possible that an overlying article of clothing could have caught gunpowder flakes and prevented much of the stippling. However, these defects on close inspection are actually small skin perforations rather than abrasions.

B. Hemorrhage into hair follicles (11.47% responses)

Gunshot wounds to the scalp may also result in secondary hemorrhage into hair follicles with a similar appearance, but these are not really hemorrhagic.

C. Insect bites (0.93% responses)

Insect bites are not usually this small and uniform in appearance, and they usually look like small irregular red-yellow abrasions.

D. Medical intervention (**CORRECT ANSWER**, 28.84% responses)

The defects surrounding the gunshot wound were made by sutures and staples during medical intervention, as seen in image #2.

E. Fragmented glass, interposed target (14.11% responses)

Fragmented glass may also produce defects resembling gunpowder stippling, but are usually larger and more irregular.

Reference:

- M.D., DiMaio, V. J. M. (2016). Gunshot Wounds: Practical Aspects of Firearms, Ballistics, and Forensic Techniques, Third Edition. CRC Press.